ABSTRACT

The present invention discloses a dual-wall catalytic converter wherein the catalytic canister and the heat shield surrounding the catalytic canister are one integral piece. The method of forming the dual wall catalytic converter includes having two tubes of different diameters, placing one tube inside another and subjecting them to a hydroforming process. The tubes are then hydroformed into the converter geometry having an outer housing and an inner housing. In order to seal the outer housing to the inner housing the end portions of the outer housing are pressed against the surface of the inner housing. The catalytic substrate is added by cutting a portion of the inner housing and the outer housing such that the hollow interior of the inner housing is exposed. The catalytic substrate is then inserted inside and the end portions are welded back to obtain the dual-wall catalytic converter.